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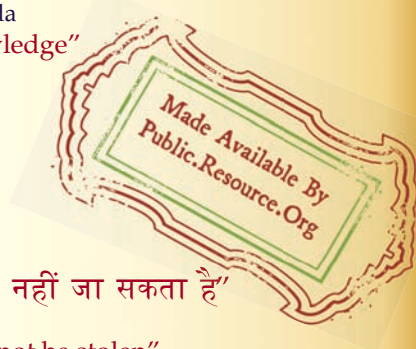
IS 3497 (1992): Steel wardrobes (adjustable type)-Specification [CED 35: Furniture]



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“Knowledge is such a treasure which cannot be stolen”

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भारतीय मानक
स्टील की अलमारियाँ (समायोज्य प्रकार) — विशिष्ट
(दूसरा पुनरीक्षण)

Indian Standard
STEEL WARDROBES (ADJUSTABLE TYPE) —
SPECIFICATION
(*Second Revision*)

UDC 684.453.5.044

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

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Price Group 2

FOREWORD

This Indian Standard (Second Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by the Furniture Sectional Committee had been approved by the Civil Engineering Division Council.

This standard was first published in 1966 and was subsequently revised in 1978. In this revision dimensions and tolerances have been modified and tests for paints have been deleted as these have been included in paint standards.

This standard contains clause 9.1 which requires the purchaser to supply certain technical information at the time of placing orders.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

STEEL WARDROBES (ADJUSTABLE TYPE)— SPECIFICATION

(Second Revision)

1 SCOPE

This standard covers the requirements for materials, sizes, construction and finish of steel wardrobes with or without the provision of a locker.

2 REFERENCES

The Indian Standards listed in Annex A are necessary adjuncts to this standard.

3 MATERIALS

3.1 Aluminium Tubes

Aluminium tubes shall conform to IS Designations 62400, 63400 or 65032 of IS 1285 : 1975.

3.2 Electrodes and Filler Rods

The welding electrodes and filler rods for gas, arc and spot welding shall conform to IS 1278 : 1972, IS 814 (Part 2) : 1974 and IS 4973 : 1968.

3.3 Mild Steel Sheets

Mild steel sheets shall conform to IS 1079 : 1988 or IS 513 : 1986.

3.4 Mild Steel Rounds and Flats

Mild steel rounds and flats shall conform to IS 1977 : 1975.

3.5 Screws

Screws shall conform to IS 1365 : 1978.

4 DIMENSIONS AND TOLERANCES

4.1 Dimensions

The overall dimensions of wardrobes shall be as follows:

Height 1980 mm

Depth 480, 610 mm

Width shall be as agreed to between the purchaser and the manufacturer.

NOTE — Minimum clearances required for the wardrobes to be put into recesses or openings, where required, shall be as follows:

For top 20 mm

For each side 10 mm

For depth 5 mm

4.2 Tolerances

The overall dimensions specified in 4.1 shall not vary by more than ± 5 mm.

5 FABRICATION

5.1 Components

Steel wardrobes shall be assembled from the components given in 5.2 to 5.11.

5.2 Sides

The sides shall be made from mild steel sheet not less than 0.8 mm thick and without any burrs or dents. The width of the side sheets shall correspond to the depth of the top and shall extend between the extreme surfaces of top and bottom.

5.3 Back

The back shall be made from mild steel sheet not less than 0.8 mm thick and without any burrs or dents. The width of the back sheets shall correspond to width of the top and shall extend between the extreme surfaces of top and bottom.

5.4 Top and Bottom

The length of the bottom shall cover the width of the wardrobe and the breadth shall cover the depth of the wardrobe. This shall be made from mild steel sheet not less than 0.8 mm thick and without any burrs or dents.

5.5 Shelves

The shelves shall be made from mild steel sheet not less than 0.8 mm thick. Shelves shall have lipped flanges 25 mm in width and 15 mm in depth. Each shelf shall be supported on four shelf brackets. The bracket shall be so designed and constructed that the shelf is securely supported and that adjustment of the bracket can be affected easily.

5.5.1 Shelf Supporting Arrangement

The shelves shall be supported on four adjustable brackets.

5.6 Drawers

The drawers shall be made from mild steel sheet not less than 0.8 mm thick suitably reinforced

to provide stiffness. The top edges shall be bent over and pressed into a knife edge.

5.7 Drawer Handle

Each drawer shall be fitted with an electroplated or suitably finished metal handle which shall be fixed with machine screws to the drawer front.

5.8 Doors

The wardrobes shall be provided with two doors leaves as described in 5.8.1 and 5.8.2.

5.8.1 Right Door

This shall be formed out of mild steel not less than 0.8 mm thick having metal stiffeners suitably welded or rivetted to stiffen the door. The door shall be hinged to the right side and shall have a hole for the handle and a key slot for the key of the lock. The clearance around the door between the door flanges, at side, top and bottom flanges shall be not more than 1.25 mm.

5.8.2 Left Door

This shall be similarly constructed as the right door and hinged to the left side. The door shall have a rebate on the free and over which the right door shall overlap. The clearance between the two doors when closed, and around the left door shall be not more than 1.25 mm.

5.9 Pedestal

The pedestal shall be made from mild steel sheet not less than 0.8 mm thick and shall be properly stiffened. The height of the pedestal shall be 125 ± 5 mm.

5.10 Hinges

The hinges shall be made of mild steel sheet not less than 1.25 mm thick and be secured to metallic hinge brackets not less than 3.15 mm thick on one side and shall be secured to the door on the other side of the fulcrum.

5.11 Locks

Steel wardrobes shall be supplied with lock. The lock shall be not less than six lever lock with duplicate keys of non-corrosive material. For locking arrangement, there shall be a three-way bolting device controlled by a lock and operated by brass or zinc.

6 ASSEMBLY

6.1 The various components shall be assembled by means of bolting or welding.

6.2 The method of gas, arc and spot welding shall conform to IS 1323 : 1982, IS 816 : 1969 and IS 819 : 1957 respectively.

7 ADDITIONAL ACCESSORIES

The following additional accessories may be provided, if so desired by the purchaser:

- a) *Mirror Frame* — This shall be of metal sheet not less than 0.8 mm thick bent in a frame of 25 mm border and screwed generally to the left door on the outside.
- b) *Mirror* — The mirror shall be not less than 5 mm thick. It shall be of size 1250 mm \times 300 mm as specified in IS 6184 : 1971.
- c) *Hanging Rod* — This shall be of mild steel conforming to IS 7138 : 1973 or aluminium tubular pipe with a wall thickness of not less than 1.6 mm and 20 mm in diameter. The mild steel hanging rod shall be covered with an aluminium sheet not less than 0.56 mm thick and in the case of aluminium hanging rod it shall be anodized or buffed. The hanging rods shall be fitted to the cabinet lengthwise with suitable brackets.
- d) *Tie Hanger* — This shall be made out of aluminium or mild steel sheet not less than 0.63 mm thick. The mild steel tie hanger shall be finished in accordance with 8.
- e) *Locker* — The drawer for locker shall be made from mild steel sheet not less than 0.8 mm thick. Drawer shall operate on slides and guides.

8 FINISH

8.1 Sheet Steel Components

8.1.1 All dents, burrs and sharp edges shall be removed from the various components. The components shall be individually pickled, scrubbed and rinsed to remove grease, rust, scale or any other foreign elements.

8.1.2 Immediately after pickling all mild steel components shall be given phosphating treatment conforming to Class C of IS 3618 : 1966. The process for application of phosphate coating shall be in accordance with IS 6005 : 1970.

NOTE — Filler material shall be applied to all the surface requiring filling and shall conform to IS 110 : 1983. Aluminium primer shall conform to IS 5660 : 1970.

8.1.3 Coat/coats of enamel paint shall then be applied as follows:

- a) Finish coat with enamels conforming to IS 151 : 1985, IS 2932 : 1974 or IS 2933 : 1975.
- b) In case of stoving enamel, the components shall thereafter be baked at a specified temperature in an oven heated uniformly. The finish shall be smooth and uniform with a hard and tough film of enamel strongly adhering to the surface. The finish shall be free from all visible defects and shall not chip when tapped lightly with a dull pointed instrument.

8.2 All other components shall be finished in colour as agreed to between the purchaser and the manufacturer.

9 INFORMATION TO BE SUPPLIED BY THE PURCHASER

The purchaser shall supply the following information to the supplier along with the order :

- a) Whether locker is required or not;
- b) Number of adjustable shelves required;
- c) Colour of finish;
- d) Whether mirror, hanging rod, tie hanger or other accessories are required; and

e) Where alternative methods of construction and finish are specified, they shall be clearly stated in the order.

10 PACKING

All the component parts shall be packed in such a way that no damage is caused to those during transit.

11 MARKING

11.1 All steel wardrobes shall be marked with a suitable mark identifying the manufacturer.

11.1.1 The steel wardrobes may also be marked with the Standard Mark.

ANNEX A

(Clause 2)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
110 : 1983	Ready mixed paint, brushing, grey filler for enamels for use over primers (<i>first revision</i>)	1323 : 1982	Code of practice for oxy-acetylene welding for structural work in mild steels (<i>second revision</i>)
151 : 1985	Ready mixed paint, spraying, finishing, stoving, enamel, for general purposes, colour as required (<i>first revision</i>)	1365 : 1978	Slotted countersunk head screws (<i>third revision</i>)
513 : 1986	Cold-rolled low carbon steel sheets and strips (<i>third revision</i>)	1977 : 1975	Structural steel (ordinary quality) (<i>second revision</i>)
814 (Part 2): 1974	Covered electrodes for metal arc welding of structural steel : Part 2 For welding sheets (<i>fourth revision</i>)	2932 : 1974	Enamel, synthetic, exterior (a) undercoating, (b) finishing (<i>first revision</i>)
816 : 1969	Code of practice for use of metal arc welding for general construction in mild steel (<i>first revision</i>)	2933 : 1975	Enamel exterior (a) undercoating, (b) finishing (<i>first revision</i>)
819 : 1957	Code of practice for resistance spot welding for light assemblies in mild steel	3618 : 1966	Phosphate treatment of iron and steel for protection against corrosion
1079 : 1988	Hot-rolled carbon steel sheet and strip (<i>fourth revision</i>)	4972 : 1968	Resistance spot welding electrodes
1278 : 1972	Filler rods and wires for gas welding (<i>second revision</i>)	5660 : 1970	Ready mixed paint, brushing, aluminium red oxide primer
1285 : 1975	Wrought aluminium and aluminium alloy extruded round tube and hollow sections (for general engineering purposes) (<i>second revision</i>)	6005 : 1970	Code of practice for phosphating of iron and steel
		6184 : 1971	Specification for furniture mirror
		7138 : 1973	Steel tubes for furniture purposes

Standard Mark

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Bureau of Indian Standards

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